



2009 ANNUAL WATER QUALITY REPORT

LOS ANGELES COUNTY WATERWORKS
DISTRICT NO. 40, ANTELOPE VALLEY

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY WATER QUALITY REPORT FOR CALENDAR YEAR 2009

The Los Angeles County Waterworks District is pleased to provide you with our 2009 Annual Water Quality Report. We are committed to serving you a reliable supply of high quality water that meets State and Federal standards. Our on-going efforts include increasing the capacity and reliability of the water system and ensuring the quality of our water supply through rigorous water quality testing.

There are two drinking water quality standards, Primary and Secondary Drinking Water Standards. Primary Drinking Water Standards are set for substances that are thought to pose a health risk at certain levels and are enforceable by law. Secondary Drinking Water Standards are set for substances that do not pose a health risk and are intended to control the aesthetic qualities related to the public acceptance of drinking water. Secondary Standards are not enforceable by law. We are pleased to inform you that during all of 2009, your drinking water met all Primary and Secondary Drinking Water Standards.

This report is intended to provide you with a better understanding of your drinking water. It contains information about where your water comes from, how your water is treated and monitored, and what contaminants may be present in your water. Moreover, we have included source water assessments, results from our water quality testing, and general information about your drinking water.

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.



WATER QUALITY MONITORING

To ensure that water is safe to drink, the United States Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

To meet these regulations, the District has contracted with a State-certified laboratory to conduct all water quality analyses. The source water is tested for chemical, physical, radiological, and bacteriological parameters as required by Federal and State regulations. We also test for additional organic and inorganic chemicals that are not regulated.

Key locations within the distribution system have been selected to monitor water quality. Every week, the distribution system is tested for bacteria and disinfectant levels to ensure that you receive safe and high quality drinking water. The distribution system is also tested for color, odor, temperature, turbidity, and disinfection by-products monthly. All tests are conducted in a State-certified laboratory using Federally approved testing methods. Our contracted laboratory is equipped with state-of-the-art instruments capable of detecting contaminants at very minute quantities.

WHERE YOUR WATER COMES FROM

The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. The District's sources of drinking water in the Antelope Valley are local groundwater and surface ("imported") water purchased from the Antelope Valley-East Kern Water Agency (AVEK). AVEK's water primarily comes from the State Water Project (SWP), the 444 mile-long California Aqueduct that transports water from the Sacramento-San Joaquin Delta to Southern California SWP contractors for use as agricultural or urban supply.

The surface water in your region comes from one of AVEK's facilities, Quartz Hill Water Treatment Plant (QHWTP) or Eastside Water Treatment Plant (EWTP). Water quality information is presented in the table contained in this report.

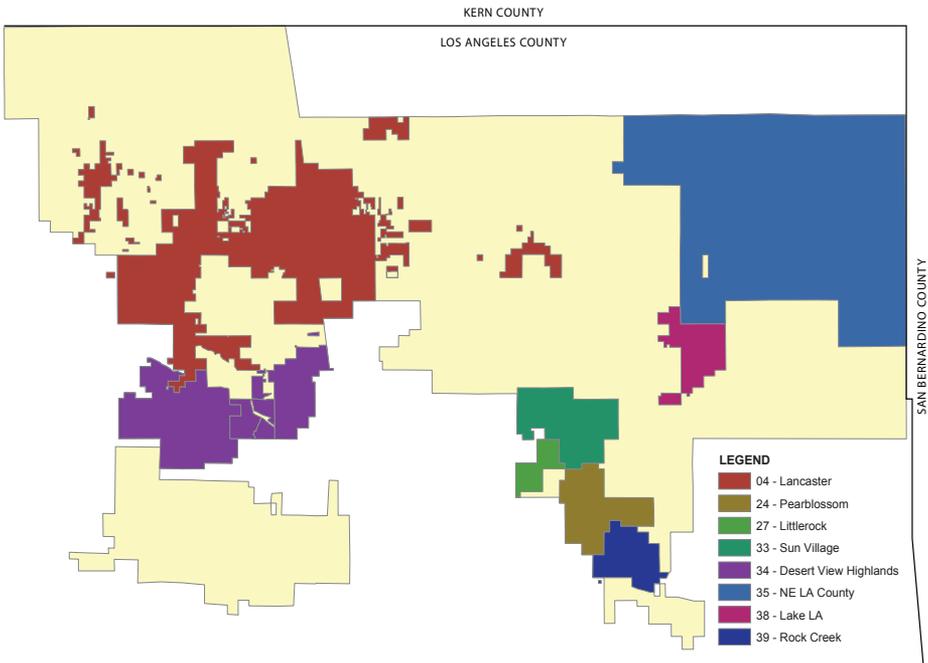
Regions 4 & 34 provides water to customers in Lancaster and Desert View Highlands. Customers received approximately 36% local groundwater and 64% SWP water from QHWTP in 2009.

Regions 24, 27, & 33 provides water to customers in Pearblossom, Littlerock and Sun Village. Customers received approximately 26% local groundwater and 74% SWP water from EWTP in 2009.

Region 35 provides water to customers in Northeast Los Angeles County. Customers received approximately 79% local groundwater and 21% SWP water from EWTP in 2009.

Region 38 provides water to customers in Lake Los Angeles. Customers received approximately 50% local groundwater and 50% SWP water from EWTP in 2009.

Region 39 provides water to customers in Rock Creek. Customers received approximately 72% local groundwater and 28% water purchased from Region 24 in 2009.



SOURCE WATER ASSESSMENT

CDPH completed a 2006 update of the Source Water Assessment (SWA) for the California Aqueduct, AVEK's water source. The SWA is used evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed. Water supplies from the Sacramento-San Joaquin Delta are most vulnerable to contamination from municipal, industrial and agricultural activities. Also influencing the quality of water pumped from the Delta is the impact of the estuarial nature of the Delta and the naturally occurring salt-water intrusion which is dependent to a large extent on the inflow from the contributing rivers. A copy of the complete assessment can be obtained by contacting AVEK by phone at (661) 943-3201.

An SWA for the District's groundwater sources was completed in January 2002. The wells in the Antelope Valley region are considered vulnerable to various contaminating activities including the following; dry cleaners, high density housing, sewer collection/septic systems, agriculture, automobile gas stations/repair and body shops, chemical processing/storage, above ground storage tanks, and other commercial/industrial activities. A copy of the complete assessment can be obtained by contacting CDPH by phone at (818) 551-2004.

CAPITAL IMPROVEMENTS

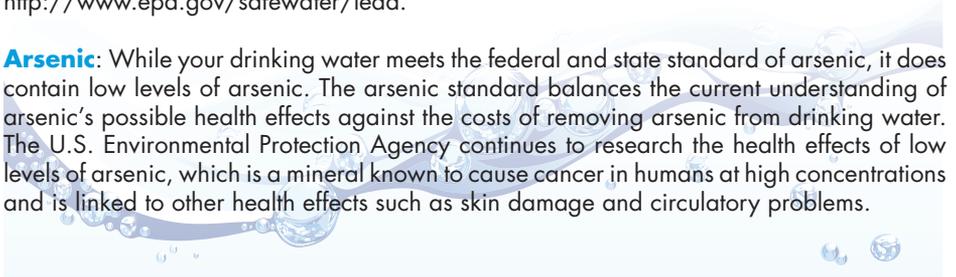
The construction of nine new groundwater wells were completed in 2009 to increase water supply reliability in the Antelope Valley.

THE QUALITY OF YOUR WATER

Lead and Copper: The District is required to sample for lead and copper at specific consumer taps. The results for lead and copper are reported as the 90th percentile. The 90th percentile is the result that is greater than 90% of all the results.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Arsenic: While your drinking water meets the federal and state standard of arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.



Disinfection by-products: Disinfection by-products, which include trihalomethanes (THMs) and haloacetic acids (HAA5), are generated by the interaction of between naturally occurring organic matter and disinfectants such as chlorine and ozone. THMs and HAA5 are measured at several points in each system and averaged once per quarter and reported as a running annual average.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

CONTAMINANTS THAT MAY BE PRESENT IN WATER

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential use.

Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure tap water is safe to drink, the USEPA and CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

WATER QUALITY DATA

The table below lists all drinking water contaminants that were detected during the 2009 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The District tests weekly for bacteria in the distribution system. Trihalomethanes, haloacetic acids, and chlorine are also tested regularly in the distribution

system and are reported below. The State requires us to monitor certain contaminants less frequently than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, may be more than one year old, which is indicated in the parameter.

PARAMETER	PHG or [MCLG]	MCL or [MRDL]	SURFACE WATER		SURFACE WATER		REGION 4 & 34		REGION 24, 27 & 33		REGION 35		REGION 38		REGION 39	
			EASTSIDE PLANT		QUARTZ HILL PLANT		CHLORINATED GROUNDWATER									
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL
PRIMARY DRINKING WATER STANDARDS																
INORGANIC CONTAMINANTS																
ARSENIC (ppb)	0.004	10	3.1-3.5	3.3	3.1	3.1	ND-16.6	5.31	ND	ND	ND-2.1	1.0	2.1	2.1	ND	ND
CHROMIUM (ppb)	(100)	50	ND	ND	ND	ND	ND-12.1	11.5	ND	ND	14.2	14.2	ND	ND	ND	ND
FLUORIDE (ppm)	1	2	0.12	0.12	0.10	0.10	ND-0.46	0.38	ND	ND	0.32	0.32	ND	ND	0.35	0.35
NITRATE (AS NO ₃) (ppm)	45	45	3.1	3.1	2.7	2.7	ND-20.7	3.7	4.3-20.1	10.3	4.4	4.4	3.8-6.2	5.0	ND	ND
SELENIUM (ppb)	(50)	50	10	10	10	10	ND	ND	ND	ND	ND	ND	5.6	5.6	ND	ND
MICROBIOLOGICAL CONTAMINANT																
TOTAL COLIFORM (%)	0	5					0-0.74	0.17	0	0	0	0	0	0	0	0
DISINFECTION BYPRODUCT PRECURSORS																
TOTAL ORGANIC CARBON (ppm)	NS	TT	0.7-2.4	1.6	0.7-2.4	1.6										
RADIOLOGICAL CONTAMINANTS																
GROSS ALPHA PARTICLE ACTIVITY (pCi/L)	[0]	15					ND-5.9	2.25	3.44-4.21	3.68	1.81	1.81	1.50-3.54	2.52	3.14	3.14
RADIUM 226 (pCi/L)	0.05	5					ND-0.61	0.12	ND-0.12	0.04	0.53	0.53	ND	ND	0.17	0.17
RADIUM 228 (pCi/L)	0.019	5					ND-2.91	0.28	ND-0.09	0.03	0.28	0.28	ND	ND	0.71	0.71
URANIUM (pCi/L)	0.43	20					ND-4.81	1.78	0.8-3.3	1.7	1.7	1.7	ND-1.71	0.90	0.8	0.8
GROSS BETA PARTICLE ACTIVITY (pCi/L)	[0]	50*					1.84	1.84								
Year of Analysis							2005-2009		2005		2006		2009		2006	
SECONDARY DRINKING WATER STANDARDS																
ZINC (ppm)	NS	5	0.57	0.57	0.41	0.41	ND	ND	ND	ND	ND	ND	4.92	4.92	ND	ND
TOTAL DISSOLVED SOLIDS (ppm)	NS	1000	230	230	220	220	176-524	303	355	355	232	232	368	368	376	376
SPECIFIC CONDUCTANCE (uS/cm)	NS	1600	450	450	266-700	511	271-425	326	522	522	393	393	587	587	604	604
CHLORIDE (ppm)	NS	500	65	65	76	76	12.4-64.3	28.4	29.5	29.5	6.2	6.2	106	106	4.1	4.1
SULFATE (ppm)	NS	500	53	53	62	62	18.5-72.9	37.5	67	67	69	69	75	75	104	104
GENERAL PHYSICAL PARAMETERS																
COLOR (units)	NS	15	<1-5	<5	<1-5	<5	ND-5	1	ND	ND	ND	ND	ND	ND	ND	ND
ODOR THRESHOLD (units)	NS	3	<1-1	<1	<1	<1	ND	ND								
TURBIDITY (units)	NS	5	0.02-0.18	0.05	0.01-0.18	0.08	0.17-4.16	1.55	0.12	0.12	0.19	0.19	0.28	0.28	0.28	0.28
UNREGULATED CONTAMINANTS																
BORON (ppb)	NS	NL=1000					ND-760	228	ND-96	61	34-59	47	120	120	99-153	126
CHROMIUM VI (ppb)	NS	NS					ND-10.5	6.0	ND-2.5	1.5	9.8-12.4	11.1	9.0	9.0	ND	ND
VANADIUM (ppb)	NS	NL=50					ND-33.5	13.9	3.1-12.9	8.5	8.4-12.3	10.4	8.0	8.0	4.7-5.7	5.2

PARAMETER	PHG or [MCLG]	MCL or [MRDL]	SURFACE WATER		SURFACE WATER		REGION 4 & 34		REGION 24, 27 & 33		REGION 35		REGION 38		REGION 39			
			EASTSIDE PLANT		QUARTZ HILL PLANT		CHLORINATED GROUNDWATER											
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL		
GENERAL MINERAL CONSTITUENTS																		
BICARBONATE ALKALINITY (ppm)	NS	NS	60	60	63	63	82-275	127	174	174	134	134	78	78	262	262		
CALCIUM (ppm)	NS	NS	20	20	21	21	6-128	30	62	62	24	24	28	28	76	76		
MAGNESIUM (ppm)	NS	NS	7.5	7.5	9.3	9.3	0.5-43.7	7.6	16	16	17	17	6	6	24	24		
SODIUM (ppm)	NS	NS	51	51	58	58	18-114	49	22	22	37	37	70	70	22	22		
TOTAL HARDNESS (ppm)	NS	NS	81	81	91	91	20-500	104	220	220	130	130	120	120	280	280		
pH (pH Units)	NS	NS	6.2-8.5	6.8	6.5-7.4	6.8	6.94-8.14	7.69	7.68	7.68	7.88	7.88	7.03	7.03	7.51	7.51		
TOTAL ALKALINITY (as CaCO ₃) (ppm)	NS	NS	49	49	52	52												
POTASSIUM (ppm)	NS	NS	<2.0	<2.0	2.3	2.3												
DISTRIBUTION SYSTEM WATER QUALITY																		
DISINFECTANTS & DISINFECTION BYPRODUCTS	MCLG or [MRDLG]	MCL or [MRDL]					RANGE OF DETECTION	HRAA										
TOTAL CHLORINE (ppm)	[4] as Cl ₂	[4] as Cl ₂					0.96-1.58	1.22	0.61-1.58	1.16	0.64-1.58	1.25	0.69-1.58	1.11	0.22-1.58	1.00		
TOTAL TRIHALOMETHANES (ppb)	NS	80					ND-102.0	33.9	2.7-99.6	45.7	6.7-20.5	14.1	ND-132.0	34.8	3.7-68.0	27.3		
HALOACETIC ACIDS (ppb)	NS	60					ND-35.1	12.6	ND-25.9	9.7	ND-6.6	2.6	ND-23.9	11.4	ND-22.8	5.8		
RESIDENTIAL TAP WATER QUALITY																		
LEAD AND COPPER							RANGE	90TH%	ABOVE AL	RANGE	90TH%	ABOVE AL	RANGE	90TH%	ABOVE AL	RANGE	90TH%	ABOVE AL
COPPER (ppm)	0.17	1.3					ND-0.34	0.38	0	ND-0.55	0.32	0	ND-0.28	ND	0	ND-0.45	0.41	0
LEAD (ppb)	2	15					ND-30.7	7.12	2	ND-131	ND	1	ND-5.7	ND	0	ND-75.7	ND	1
NUMBER OF SITES TESTED								51		20		15		30		12		
YEAR OF ANALYSIS								2007		2008		2008		2008		2008		

TERMS AND ABBREVIATIONS USED IN THE WATER QUALITY DATA TABLE

Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.

Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Public Health Goal (PHG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL) is the level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG) is the level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set by the USEPA.

Primary Drinking Water Standards (PDWS) are MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Regulatory Action Level (AL) is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) is a required process intended to reduce the level of a contaminant in drinking water.

* 50 pCi/L is used as a screening level

ppm = parts per million (milligrams per liter)
ppb = parts per billion (micrograms per liter)

pCi/L = picoCuries per liter
ppt = parts per trillion

N/A = Not Applicable
ND = None Detected

NS = No Standard
NL = Notification Level

HRAA = Highest Running Annual Average
AL = Action Level



BOTTLED WATER, HOME TREATMENT DEVICES, AND SOFTENERS

Bottled water need not be purchased for health reasons, since tap water meets the Federal and State drinking water standards. If taste is an issue, bottled water might be the answer, but keep in mind that it is over 1,000 times more expensive than tap water.

Installation of a home treatment unit is a personal matter. These devices are not required to make the water meet the Federal and State drinking water standards. In fact, if not properly maintained, these devices may actually cause water quality problems. However, some people are concerned about the taste of their drinking water. If taste is an issue, then a home treatment unit might be appropriate. All units require maintenance and should be bought from a reputable dealer. They should also be tested and validated against accepted performance standards like those used by the National Sanitation Foundation (NSF).

Hardness in drinking water is caused by two non-toxic minerals: calcium and magnesium. Hard water reduces the amount of lather or suds produced by soap. Hard water also tends to leave deposits such as rings in the bathtub, scales on cooking pots and irons, and spots on glassware. At a hardness level above 120 milligrams per liter, a water softener might be considered to reduce deposits in the hot water system and to make washing easier. Distilled water may be used in place of drinking water in irons to prevent deposits.

Water softeners generally replace the non-toxic hardness minerals in the water with sodium. Although the amount of sodium produced is relatively insignificant in comparison to the sodium found in food, people with sodium restricted diets should consult their doctor or install a softener for their hot water supply only.



WATER CONSERVATION TIPS

"We all need to conserve water," is the resounding message from Mark Cowin, Director of the State Department of Water Resources. Despite recent storms California continues to face a water crisis resulting from the past three years of drought as well as environmental constraints. According to Mr. Cowin California's water shortage will continue this year. Residents are highly encouraged to make an extra effort to conserve water given the current condition of the region and District's water supply.

In addition to protecting the quality of water delivered to you, we also promote and implement water conservation programs for the Districts' customers. You can learn how to conserve water at home and save money by calling (888) 828-8602 or email watersurveys@niagaraconservation.com to request a conservation specialist to visit your home at no cost to you. We will provide personalized recommendations for water conserving measures to reduce your water usage without affecting your quality of life. In addition, we offer rebates of up to \$150 on water saving devices like high efficiency clothes washers. For more information visit www.lacwaterworks.org or contact Ms. Virginia Fowler at (626) 300-3362.

Every California resident can take these simple steps to save water and reduce our impact on the planet.

- **Adjust your sprinklers.** Up to 70 percent of residential water use goes to maintaining our yards. Try taking a minute or two off the timer.
- **Check your system.** Do a weekly check for broken or clogged sprinkler heads and replace them right away. Make sure you are watering your yard and not the driveway or sidewalk.
- **Fix those leaks.** Just a drip can waste more than 10,000 gallons per month. A leaking flapper on a toilet also increases flows at the water treatment plant.
- **Plant native species or drought-tolerant plants.** Many of the lawns and plants we use are not intended for the unique climate in Southern California.

Up to 70% of residential water use occurs outdoors. Make sure your sprinklers water the yard, not the sidewalk or street. Landscaping your yard and garden with California native and drought-tolerant plants is also a smart alternative for residents who want to have a beautiful garden and save water and money. These plants are accustomed to local weather and soil conditions and thrive with little summer watering. Using them not only saves water, but saves maintenance time and produces a habitat for native birds, beneficial insects and wildlife. The best time to plant native plants is between October and May each year.



PUBLIC PARTICIPATION AND CONTACT INFORMATION

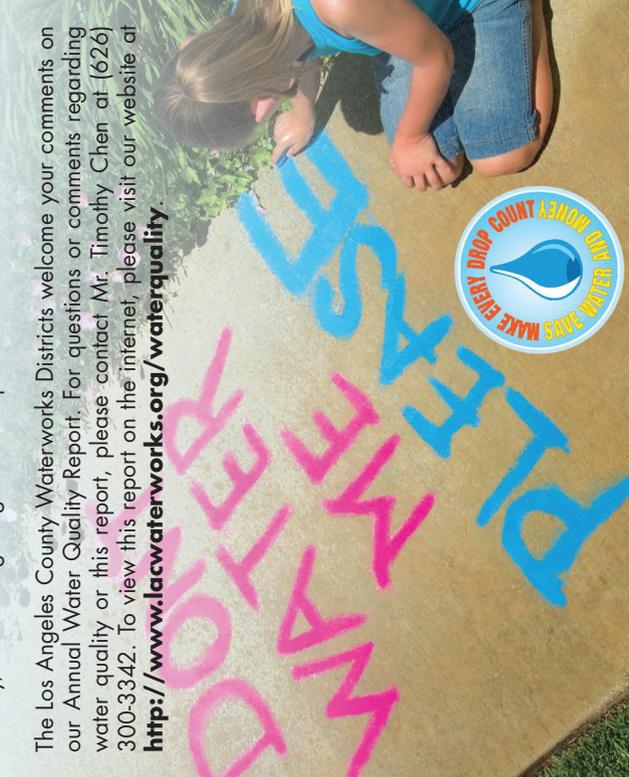
The regular meetings of the Los Angeles County Board of Supervisors are held every Tuesday at 9:30 a.m. in the Board's Hearing Room located at 500 West Temple Street, Room 381B, Kenneth Hahn Hall of Administration in Los Angeles. The regular meeting of the Board held on the fourth Tuesday of each month is primarily for the purpose of conducting legally required public hearings on zoning matters, fee increases, special district proceedings, property transactions, etc. On Tuesdays following a Monday holiday, the meetings begin at 1:00 p.m.

The Los Angeles County Waterworks Districts welcome your comments on our Annual Water Quality Report. For questions or comments regarding water quality or this report, please contact Mr. Timothy Chen at (626) 300-3342. To view this report on the internet, please visit our website at <http://www.lacwaterworks.org/waterquality>.



900 S. Fremont Ave.
Alhambra, CA 91803

To the Water Customer at:



Make every drop count in this drought. Visit www.lacwaterworks.org for rebate information and more water saving tips.